

REMARKS/ARGUMENTS

Reconsideration of the application is requested.

Claims 1-19 and 21 remain in the application. Claims 1-9 and 21 have been withdrawn. Claim 20 has been cancelled.

In the last paragraph on page 2 of the above-mentioned Office action, claims 10, 12-15, and 17-19 have been rejected as being unpatentable over Oxford (US Pat. No. 4,060,097) in view of Admitted Prior Art by the Applicants under 35 U.S.C. § 103 (a) .

As will be explained below, it is believed that the claims were patentable over the cited art in their original form and the claims have, therefore, not been amended to overcome the references.

Before discussing the prior art in detail, it is believed that a brief review of the invention as claimed, would be helpful.

Claim 10 calls for, inter alia:

inserting at least one semiconductor device having at least one deposited layer of photoresist material into the reactor;

inserting fluid ingredients for removing the photoresist material from the semiconductor device into a heated fluid;

transmitting an emitted optical radiation towards the fluid;

receiving transmitted optical radiation transmitted through the fluid;

detecting an optical radiation intensity not influenced by process induced bubbles; and

controlling the insertion of at least one of the ingredients in dependence on the detected optical radiation intensity.

Oxford teaches an automatic etching system, particularly used for etching of copper work-pieces where a continuous reduction of the cupric to cuprous ions is performed. The cuprous ions are totally ineffective as an etchant and have a tendency to retard the etching procedure, whereas the concentration of copper in the solution increases. Such a metal etching process deals with completely different fluid and reactive components which make the etching procedure gradually less efficient. The process according to Oxford reflects a process for selective etching of metal layers in the depth of a metal layer, wherein the etchant according to Oxford is a solution of cupric-chloride which is effective in etching metal from the work-piece.

In contrast, the invention of the instant application concerns a completely different process for removing photoresist material from a semiconductor device. In a

removing process to remove such organic material, carbon components of the photoresist material are oxidized and formed into carbondioxide, the hydrogen components being formed into water. Such a process is not an etching process as taught by Oxford, but a removing process for removing organic photoresist material from an aerially arranged surface of the semiconductor device. In this regard, it is to be noted that organic material is not to be removed by etching. Thus, the process type according to the invention the instant application is significantly different from the process type according to Oxford.

The Examiner starts his argumentation with Oxford as the closest prior art and combines this prior art with the Admitted Prior Art by Applicants. However, it is believed that a reasonable problem-solution-approach has to be started with the Admitted Prior Art as the closest prior art because the closest prior art has to deal with the same purpose or same commercial application and must have similar technical effects as compared to the field of invention of the instant application. In other words, the closest prior art for starting the problem-solution-approach concerns the same technical field as the invention of the instant application does. In the present case, Oxford does not concern a process for removing an organic material from a semiconductor device

as already outlined above. In contrast, the Examiner starts with Oxford providing some individual features similar to that of the invention of the instant application, but not being applicable to perform the purpose and function of a process for removing photoresist material from a semiconductor device according to the invention of the instant application. Thus, it is believed that the Admitted Prior Art has to be regarded as the closest prior art.

Consequently, when dealing with a problem concerning a process for removing photoresist material from a semiconductor device as outlined in the description referring to the background art of the invention, it is believed that a person skilled in the art would not contemplate Oxford for the reasons as outlined above as well as discussed in the response to the previous Office action dated April 29, 2003. A person skilled in the art would contemplate Oxford only upon a hindsight view, namely only if he or she already knew a probable solution of the problem which is taught by the invention of the instant application.

It is accordingly believed to be clear that none of the references, whether taken alone or in any combination, either show or suggest the features of claim 10. Claim 10 is, therefore, believed to be patentable over the art and since

claims 12-15 and 17-19 are ultimately dependent on claim 10, they are believed to be patentable as well.

In the first paragraph on page 5 of the above-mentioned Office action, claim 11 has been rejected as being unpatentable over Oxford in view of Admitted Prior Art by the Applicants and further in view of O'Neil et al. (US Pat. No. 5,683,538) under 35 U.S.C. § 103(a).

As discussed above, claim 10 is believed to be patentable over the art. Since claim 11 is dependent on claim 10, it is believed to be patentable as well.

In the last paragraph on page 5 of the above-mentioned Office action, claim 16 has been rejected as being unpatentable over Oxford in view of Admitted Prior Art by the Applicants and further in view of Dennis (US Pat. No. 4,710,261) under 35 U.S.C. § 103(a).

As discussed above, claim 10 is believed to be patentable over the art. Since claim 16 is dependent on claim 10, it is believed to be patentable as well.

In view of the foregoing, reconsideration and allowance of claims 10-19 are solicited.

In the event the Examiner should still find any of the claims to be unpatentable, counsel would appreciate a telephone call so that, if possible, patentable language can be worked out.

• If an extension of time for this paper is required, petition for extension is herewith made. Please charge any fees which might be due with respect to Sections 1.16 and 1.17 to the Deposit Account of Lerner and Greenberg, P.A., No. 12-1099.

Respectfully submitted,

For Applicants

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